

METHOD, COMPUTER READABLE MEDIUM, AND NODE FOR A THREE-
LAYERED INTRUSION PREVENTION SYSTEM FOR DETECTING NETWORK
EXPLOITS

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ABSTRACT OF THE INVENTION

10 A method of preventing intrusions on a node of a network comprising
monitoring, by a first layer of an intrusion prevention system, application data of
applications running at on the node, monitoring, by a second layer of the intrusion
prevention system, transport layer data of the node, and monitoring, by a third layer of
the intrusion prevention system, network layer data of the node is provided. A
computer-readable medium having stored thereon a set of instructions to be executed,
the set of instructions, when executed by a processor, cause the processor to perform a
15 computer method of monitoring application layer data, by a first layer of an intrusion
prevention system comprised of the instructions, of a node of a network, the node
comprising the processor, monitoring transport layer data, by a second layer of the
intrusion prevention system, of the node of the network; and monitoring network
layer data, by a third layer of an intrusion prevention system, of the node of the
20 network is provided. A node of a network, comprising a central processing unit, a
memory module for storing data in machine readable format for retrieval and
execution by the central processing unit, and an operating system comprising a
network stack comprising a protocol driver, a media access control driver, the
memory module storing an instance of an intrusion protection system application
25 operable to monitor application layer data and an intrusion prevention system
transport service provider layer, and the operating system having an intrusion
prevention system network filter service provider bound to the media access control
driver and the protocol driver is provided.

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